





The Fundamentals of Asset Management A "Hands-On" Approach



September 11-12, 2012

Training Center:

Tacoma Public Utilities 3628 South 35th Street Tacoma WA 98409-3192

Sponsored by:

South Sound Subsection AWWA PNWS.

U.S. Environmental Protection Agency's Office of Water and Office of Research and Development

Registration Deadline: August 31, 2012 (Register Early – Space is Limited)

<u>The Challenge:</u> Over the past half century, America has spent trillions of dollars building some of the finest infrastructure that history has ever seen. This investment has played a substantial role in the sustained prosperity and quality of life of our country. But in many communities, this infrastructure is severely stressed from overuse, under funding of maintenance and renewal, and aging.

A comprehensive approach to managing our capital assets is overdue – one that brings "state of the practice" advanced asset management (AM) concepts, tools, techniques, and technologies to bear on managing for cost-effective performance. This approach focuses relentlessly on providing sustained performance to the customer at the lowest life-cycle cost and at an acceptable level of risk to the organization.

<u>The Focus:</u> Public sector managers have been managing assets for decades. However, it is clear that what we have been doing in the past will not be sufficient to address the growing and increasingly complex challenges that lie ahead. Practical, advanced techniques for better management of assets have been developed and refined in both the private sector in the US and in water and wastewater agencies around the world. Management thinking is centered on long-term effectiveness, service sustainability, and effective environmental management. How can these advanced asset management concepts, tools and techniques be most effectively transferred into the water and wastewater industry, more specifically, into your agency? Where to start? How to proceed? How to select appropriate tools?

<u>The Workshops:</u> The AM challenge for US agency officials is one of "knowledge transfer." For that reason, these workshops have been designed as an extensive hands-on experience. Each workshop:

- Incorporates a real-world storyline to realistically demonstrate an advanced asset management way of approaching difficult asset-driven problems.
- Is built around participant exercises that demonstrate the concepts, techniques and tools of advanced asset management.
- Is centered on **case-based mentoring** by expert asset management practitioners.

The agenda is built around five core AM questions. The workshops focus on demonstrating, step-by-step, how an agency would select and deploy "Best Appropriate AM Practices" that are best suited to that agency.







Agenda Highlights

Day One

7:30 am – 8:00 am Coffee and Pastries, Name Badge Pickup 8:00 am – 4:30 pm Duration of the Workshop Introductions

Background and Context

- The Changing Utility Industry
- The Emerging Utility Of Tomorrow

Introduction of Storyline, Overview of Fundamental Concepts and Core Practices

- Introduction Of Storyline
- A Definition Of AM
- A "Meta View" of the AM Paradigm
- Managing The Asset Base's "Potential To Fail"
- Payoffs And Benefits, Downsides
- The "Five Core Questions" and the "10-Step AM Process"

Storyline and Worksheets - Tom's Bad Day

Core Question 1: What Is The Current State Of My Assets?

- What is an Asset?
- Building a "Process Layout" Schematic
- Creating The "Asset Hierarchy"
- Defining The "Data Standard"
- Initial Condition Analysis, Remaining Physical Life
- The Four Major Failure Modes
- Determining Replacement Value
- Financial Accounting versus Managerial Accounting

Core Question 2: What Is My Required "Sustainable" Level Of Service (LOS)?

- What Is "LOS"? Why Do It?
- How It Works (Strategic Level Versus Operations Level)

Core Question 3: Which Assets Are Critical To Sustained Performance?

- Understanding How My Assets Can Fail the Four Major Failure Modes
- Determining The "Likelihood Of Failure"
- Determining The "Consequences of Failure"
- How to Measure Our Agency's "Business Risk Exposure"?

Discussion, Q & A and Feedback

Day Two

7:30 am – 8:00 am Coffee and Pastries 8:00 am –3:45 pm Duration of Workshop Summary of Day 1, Outline Of Day 2

Core Question 4: What Are My Best Minimum Life-Cycle-Cost CIP And O&M Strategies?

- What Alternative "Treatment" (Management) Options Are Feasible?
- Which Is The Best Option? The Basics of "Optimized Renewal Decision Making"

Core Question 4: O&M (Continued)

- Using AM To Drive Operations And Maintenance
- Moving Systematically Into Reliability Centered And Condition-Based Maintenance

Core Question 4: CIP (Continued)

- Using AAM To Drive CIP
- Strategic CIP Validation

Core Question 5: What is My Best Long Term Funding Strategy?

- So, Valuation Really Does matter?
- Determining A Sustainable Renewal Funding Level
- Effectively Telling the Funding Story
- The "Whole of Business" Perspective Using AAM For Rate Setting & Budgeting
- Building Your First Asset Management Plan

Focus Topic 1: Deploying an AAM Program

- The Four Fundamental Deployment Strategies
- "Gap Analysis" Benchmarking & Developing the AAM Improvement Program
- The Human Side
- The Political Side
- Implementation Work Plans Lessons Learned

Closing Summary, Questions, Comments

About Our Trainers:

Mr. Steve Allbee – USEPA Project Director, Gap Analysis; primary author, USEPA's The Clean Water and Drinking Water Infrastructure Gap Analysis; 33 years EPA – development of financing programs; BA, MA, MPA.

Mr. Duncan Rose – Technical Director & Principal Consultant – GHD, former city/county manager, co-author of WEF's textbook, Managing the Water and Wastewater Utility; co-author (US Team), International Infrastructure management Manual (sixth edition); 30 years state and local government management, Adjunct Faculty, Florida State University, Askew School of Public policy; BA, MSP, MAPA

Over Night Hotel Accommodations

Attendees are required to make their own hotel arrangements. Below are some of the local hotels located within a short distance of the workshop location.

Best Western Tacoma Dome Hotel 2611 East E Street, Tacoma, WA (253) 272-7737 LaQuinta Inn Tacoma 1425 East 27th Street, Tacoma, Washington (253) 383-0146 Days Inn Tacoma 6802 Tacoma Mall Boulevard Tacoma, WA 98409 (253) 475-5900

The South Sound Subsection Presents a Training Opportunity

A 2-day EPA workshop covering the fundamentals of asset management in a "hands on" approach.

Door prizes will be raffled off throughout the workshop!

Please register at https://sites.google.com/a/pnws-awwa.org/washington-south-sound/home/registration-for-upcoming-classes.

Seats are limited; please register early to reserve your space.

DATE: September 11 and 12, 2012

LUNCH: Lunch both days as well as early morning coffee and pastries

and break refreshments.

PLACE: Tacoma Public Utilities

3628 South 35th Street

Tacoma, WA 98409

TIME: Day 1 8:00am-4:30pm, check in at 7:30am

Day 2 8:00am-4:00pm

REGISTRATION: Register online at https://sites.google.com/a/pnws-

awwa.org/washington-south-

sound/home/registration-for-upcoming-classes

COST: \$250 Registration Fee

CEU's: 1.4 CEUs

OUESTIONS: Awarded for entire attendance only

Contact Shannon Rauch at (253)502-8455

or email at srauch@cityoftacoma.org





